

Work Order ID 59965

June 21, 2010 1:19:15 PM



Page 1

Item ID: K10019

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 6/21/10

Start Qty: 1.00



Cust Item ID:

Required Date: 6/24/10

Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

CL

Date:

10/6/21

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

N/A

Rev N/A

100

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

Assemble D2195-1/-2/-3 using MS20470AD4-14 rivet ☐ Assemble D2196-1/-2/-3 using MS20470AD4-14 rivet ☐ Assemble D2197-1/-2/-3 using MS20470AD4-14 rivet

GT 10-07-23

P40

110

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/07/23

8/10/07/29

HL

120

White Gloss(Ref:4.3.5.2) per QS1005 4.3-Steel

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 11:30 ☐ OVEN TEMPERATURE: 100° ☐ FINISH TIME: 12:00 ☐ *****Powder Coat

D2195, D2196, D2197*****

BL 10-7-29

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: K10019 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>59965</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.06.24	100	PICK KIT NOT UPDATED TO LATEST DWG REV. (D3191-5 MISSING, D3191-1 = Qty 2)	GP 10.06.24 AS 042	UPDATE PICK KIT. RECOMMEND REMOVING K10019, ADD D3191-X to D3192-041/042 W/O, CREATE SEPARATE W/O FOR D2195, D2196, D2197			GP 10.06.24 AS 042	S 10/07/23
10.07.23	100	upon riveting together of 2196-1, 2196-2, 2196-3 pieces together, rivet MS20470 AD4-14 squished wrong upon drilling out all 3 parts were scrapped PC: employee error / Lachal	/AS 042	scrap + replace D2196-1 B 40760 x1 D2196-2 B 40764 x1 D2196-3 B 60056 x1 DMS20470 AD4-14 B 1046 x7	RT 10.07.23	S 10/07/23	/AS 042	S 10/07/23

NOTE: Date & initial all entries

Work Order ID 59965

June 21, 2010 1:19:15 PM



Page 2

Item ID:	K10019	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Bracket Assembly					
Start Date:	6/21/10	Start Qty:	1.00		Cust Item ID:	
Required Date:	6/24/10	Req'd Qty:	1.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00	=> MU 10/07/29			X1	0		
140 Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP K10019 Location: <input type="checkbox"/> PPP Rev: _____	0.00 0.00	installed on D3192-042 B57701			25		10-09-27	QC21- 10/09/27 JA mf 10-09-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June 21, 2010 1:19:14 PM

Page 1

Work Order ID: 59965

Parent Item: K10019

Parent Item Name: Bracket Assembly

Start Date: 6/21/10

Required Date: 6/24/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP: A 08.07.24 new issue EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2195-1 Bracket		Manufactured	No		B60928 B43299	100	Each	2.0000	1	1	1	10-07-28 10-06-22	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				Mezz		2							
				40763		2							
D2195-2 Bracket		Manufactured	No		B60929 B43299	100	Each	2.0000	1	1	1	10-07-29 10-06-22	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				Mezz		2							
				40761		2							
D2195-3 Spacer		Manufactured	No		B60930 B60231	100	Each	1.0000	1	1	1	10-07-29 07-23 10-06-22	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				Mezz		1							
				40762		1							
D2196-1 Bracket		Manufactured	No			100	Each	3.0000	1	1	1	10-06-22	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				Mezz		3							
				40760		3							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June 21, 2010 1:19:14 PM

Work Order ID: 59965



Parent Item: K10019

Parent Item Name: Bracket Assembly

Start Date: 6/21/10

Required Date: 6/24/10

Start Qty: 1.00

Required Qty: 1.00

D2196-2 ✓
 1 125+
 Bracket

Manufactured	No	100	Each	3.0000	1	1
						RT 10-06-22

Location Loc Qty Loc Code

Mezz		3	
40764		3	X1

D2196-3 ✓
 Spacer

Manufactured	No	100	Each	1.0000	1	1
						RT 10-06-22

Location Loc Qty Loc Code

Mezz		1	
40832		1	X1

D2197-1 ✓
 Bracket

Manufactured	No	100	Each	7.0000	1	1
						RT 10-06-22

Location Loc Qty Loc Code

Mezz	60032 x1	3	
19154		4	
40766		3	

D2197-2 ✓
 Bracket

Manufactured	No	100	Each	7.0000	1	1
						RT 10-06-22

Location Loc Qty Loc Code

Mezz		3	
19154		4	
40767		3	
60033 x1			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June 21, 2010 1:19:14 PM

Work Order ID: 59965

Parent Item: K10019

Parent Item Name: Bracket Assembly

Start Date: 6/21/10

Required Date: 6/24/10

Start Qty: 1.00

Required Qty: 1.00

D2197-3 / ✓ Manufactured No

100 Each

26.0000

1 1

B60036



85 10-06-13

Spacer

Location

Loc Qty

Loc Code

Mezz

1

19154

25

40833

1

D2198-1 / ✓ Manufactured No

110 Each

14.0000

6 6



85 10-06-13

Bracket

Location

Loc Qty

Loc Code

ST008

14

57742

14

140 Each

3.0000

12 3

x6



85 10-06-13

D3191-1 / ✓ Manufactured No

Backer Plate

Qty (2)

6/10-06-24

B60030

Location

Loc Qty

Loc Code

Mezz

3

40983

3

140 Each

18.0000

13 3



85 10-06-13

D3191-3 / ✓ Manufactured No

Backer Plate

Location

Loc Qty

Loc Code

Mezz

3

40984

3

ST042

15

57747

15

x3



85 10-06-13

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10-07-02		<i>per change</i> <i>add to pick list</i> D3191-5 as per DWG D3192 D3191-5 B <u>60038</u> x1 <i>per change</i>	BT	10-07-02				

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 4

June 21, 2010 1:19:15 PM

Work Order ID: 59965



Parent Item: K10019



Parent Item Name: Bracket Assembly

Start Date: 6/21/10

Required Date: 6/24/10

Start Qty: 1.00

Required Qty: 1.00

MS20470AD4-14 /

Purchased

No

140

Each

283.0000

16

16



ET 10-06-23

Rivet

Location

Loc Qty

Loc Code

ST320

283

1046

233

109059

50

x16

June 21, 2010 1:19:15 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM No.	QTY	PART NUMBER	DESCRIPTION
1	X	D2195	BRACKET ASSEMBLY
7	1	D2195-1	BRACKET
8	1	D2195-2	BRACKET
9	1	D2195-3	SPACER
15	6	MS20470AD4-14	RIVET

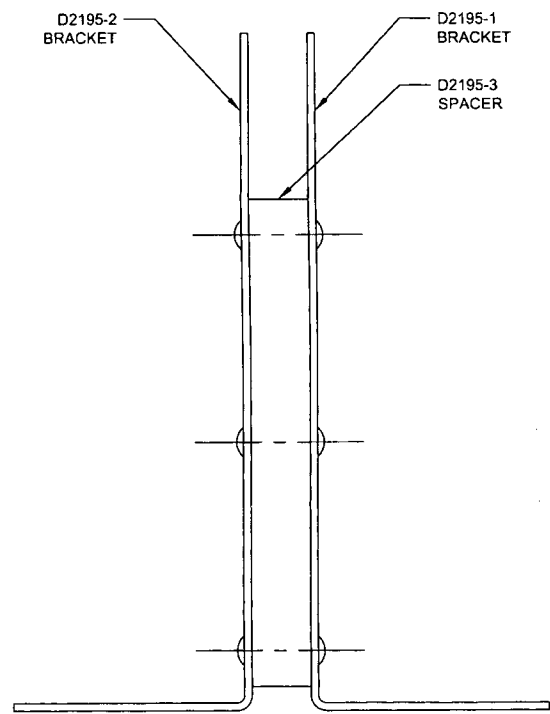
C/L 10/6/22
W/O: 59965

RELEASED
09/01/13/14

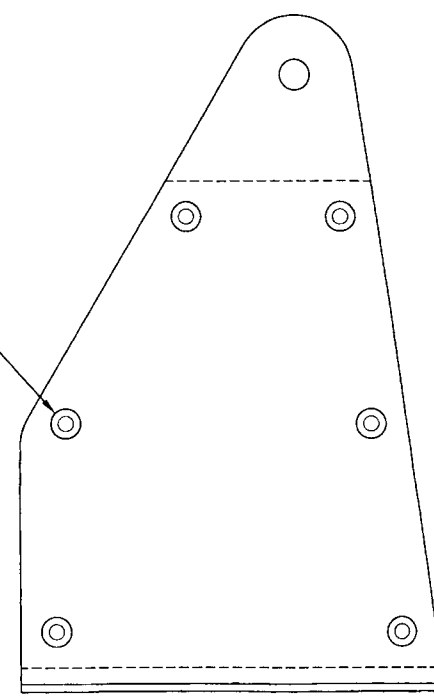
NOTES:

- 1) MATERIAL:
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2195" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.26 lbs

D	RE-DESIGN. REF NCR 08-110.	AJS	08.11.25
C	REDRAW: D2195-3 NOW 0.5" THICK	CP	03.05.28
B	RE-DESIGN	JB	93.09.23
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	5	DRAWING NO.	REV. D
MFG. APPR.	3	D2195	SHEET 1 OF 3
APPROVED	4	TITLE	SCALE
DE APPR.	4	BRACKET	NTS
DATE	08.11.25	<small>COPYRIGHT © 1993 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



MS20470AD4-14
RIVET
6 PL

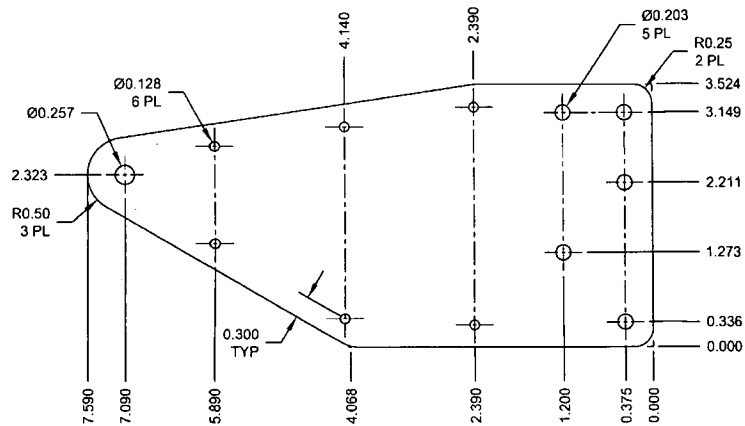


59965
[Signature]

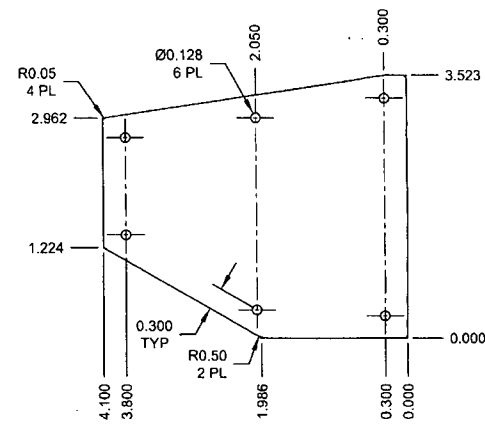
D2195 BRACKET ASSEMBLY

RELEASED
07/01/15

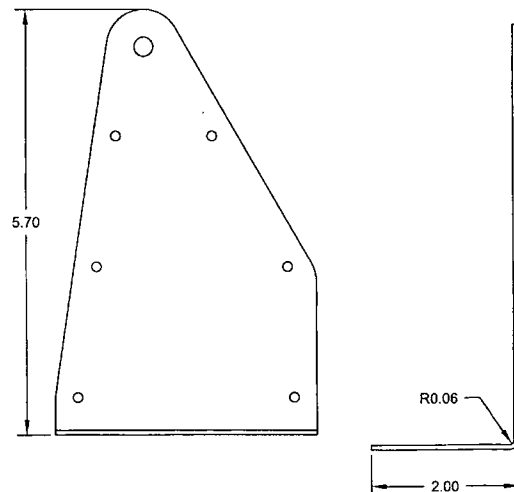
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>[Signature]</i>	D2195	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BRACKET	NTS
DATE	08.11.25	COPYRIGHT © 1993 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



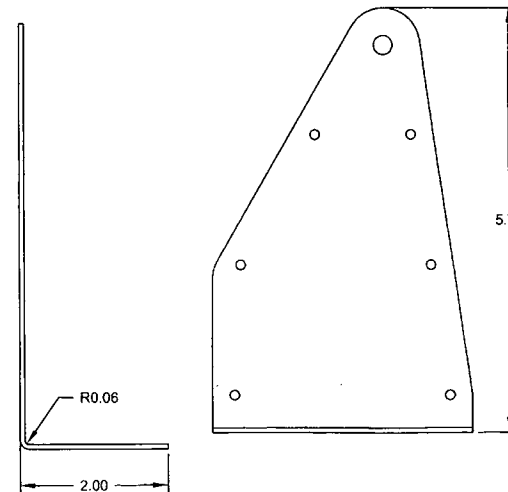
D2195-1F BRACKET FLAT PATTERN



D2195-3 SPACER



D2195-2 BRACKET
MAKE FROM D2195-1F







D2195-1 BRACKET
MAKE FROM D2195-1F

NOTES:

- 1) MATERIAL: -1 & -2: AISI 304/316 S.S. SHEET, 0.064 THICK
PER AMS 5513 OR AMS 5524
REF. DART SPEC M304S
- 3: 5052-H32 ALUMINUM SHEET, 0.500 THICK
PER AMS-QQ-A-250/8 OR AMS 4016
REF. DART SPEC M5052H32S.500
- 2) FINISH: -3 ONLY: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHT

59965
RELEASED
07/01/15

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D2195	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
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